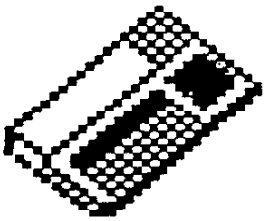

HUG

HOUSTON USERS' GROUP
[FOR THE TI-994A & COMPATIBLES]

JULY
1988

MEETING SCHEDULE

FIRST SUNDAY OF EVERY MONTH
(2nd Sunday if 1st Sunday is on a holiday weekend)

HUG TIBBS - 24-hour BULLETIN BOARD
(713) 781-4844 300/1200 bps

The Houston Users Group is organized to promote the use of the TI-99/4A Home Computer, and compatible devices. We invite persons of similar interest to join with us. HUG is not affiliated with TEXAS INSTRUMENTS, INC.

****

AT THE NEXT MEETING

SUNDAY, JULY 10, 1988 2:00 P.M.

St. John's School - 2401 Claremont

AGENDA for JULY MEETING: Yes, we will have a meeting, but I missed contacting Mike, and therefore do not know what will be going on! (There are those who say that I rarely DO know, anyway--they're RIGHT!). rtl

****

IN THIS ISSUE

Articles:	Funnelweb 4.0 Menu Charts	
	July's Library Addendum plus rest of June's	
	TIPS From The TIGERCUB, #47	
	Geneve Hardware "Enlightenment", J. Peter Hoddie	
	Gram Karte Review, by Dennis Martens	
	Computer Terms Re-defined	
Other Departments:	Editors.Echoes	Meeting and Member Info
	HUG Classifieds	

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      1988                    1988
          JULY                    AUGUST
   S  M  T  W  T  F  S     S  M  T  W  T  F  S
   -  -  -  -  -  -  -     -  -  -  -  -  -  -
                  1  2              1  2  3  4  5  6
   3  4  5  6  7  8  9     7  8  9 10 11 12 13
[10]11 12 13 14 15 16   (14)15 16 17 18 19 20
  17 18 19 20 21 22 23    21 22 23 24 25 26 27
  24 25 26 27 28 29 30    28 29 30 31
  31
```

[x]: HUG Meeting date

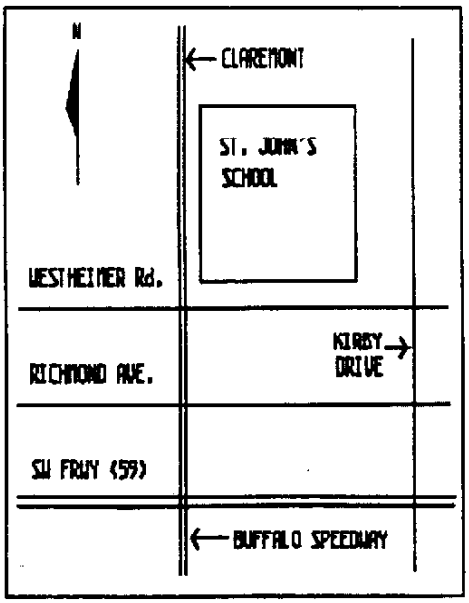
Note: July, August, September, and November meetings will be on SECOND Sundays ....

HUG MEMBERSHIP INFORMATION

Annual membership fees for HUG are $15. A ONE TIME initiation fee, for new members ONLY, is $10. The initiation fee, used to maintain user group services, entitles the new member to receive six free programs - of his own choosing - from the groups Public Domain and Shareware software library. Members receive a monthly issue of the HUG newsletter, may order programs from the software library and are permitted access to all "user" levels on the Group's bulletin board (BBS), HUG-TIBBS. All renewal and/or new membership fees must be sent to the Group's Secretary at: Houston User Group, c/o Ruth Sandy Herman, 6219 Sanford Road, Houston, Tx. 77096. Membership applications are available either at the same address, at meetings, or from the (BBS): HUG-TIBBS at (713) 481-4844. Please direct any questions regarding current membership to the Membership VP, Kim Peterson (713) 498-3047.

For a free sample of this Newsletter please contact the Editor. Back issues of the HUG Newsletter are available at $1.00 (postpaid)/issue, or $.50 / issue at the meetings, for members. Call editor for availability.

HUG MEETING LOCATION MAP



HUG CLASSIFIEDS

Commercial Advertising Rates

Full Page:	$15.00	per mo.
Half "	10.00	" "
1/4 "	7.50	" "
1/8 "	5.00	" "
Business Cards	2.00	" "

(Multi-Mo. disc. available)

Individual HUG Members

List your PERSONAL software/hardware items wanted or for sale for

: FREE :

in this section.

Call Editor: 469-5089

FOR SALE

TELECOMMUNICATING EQUIPMENT - Compuserve Starter Kit unopened $25.00, Volksmodem 300 Baud MODEM, ac adapter, TI RS232 cable.... $40.00 Call RON HODGMAN (713) 358-8618 evenings.

BASIC EQUIPMENT - TI-99/4A console (still in box), XB, Speech Synthesizer. $75.00 Leave Msg on HUG-TIBBS to: DAVID HIRSCH

SYSTEM - Console, PEB w/ TI-SS drive, TI-Disc Controller, RS/232, 32 k card, plus stand-alone disc controller and double box w/ two SS TI-drives, Extra console, Widget, X-Basic; TI-W; MPlan; TE-II; PRK; HBM; Navarone Data Base Man.; power strip, discs--$350.00. Also, 13" Color Monitor--$100.00. Epson (TI) MX-80 Impact Printer--$100.00. Also has for sale separately a Brother 50 typewriter with 2k interface. Contact James E Keith of Johnson Users Group, at 713-333-4504.

NON-MEMBER has: Console, PEB w/ Drive, TI controller, RS232 and 32k cards, plus Extra Console (new in box); External Drive in ext. box; Speech Synth.; Printer; TI-Writer, Multiplan, X-Basic. Call Irving Feld at 723-9898.

==========

INFORMATION AND DRAWINGS - on John Willforth's "32k in the console" micro expansion can be obtained by sending your address and Self-addressed legal size envelope to:

Editor, HUG News; Box 690311, Houston Texas 77269.

This is the console mod which uses 4 chips 6264LP15 to replace the 32k card in PEB. Costs <$20.00 and WORKS just like the original memory. Great for "second console" or for non-PEB-systems, or if your 32k card dies! Requires console dis-assembly and soldering, and about 6 hours. Plans courtesy of J. Willforth and other supporters of the 99/4A.

)------(NOTICE)------(

SUBMITTALS of articles of general interest are welcomed, with implicit under-standing of permission to copy and publish these documents. It is requested that all submittals be in publishable format if typed, or in DV/80 disk files. Graphics, art, schematics, etc, should be submitted in final form and size, and repro quality. Other information and articles are welcomed by the Editor as data sources, and may be edited and incorporated as needed.

Please indicate Original Source and publishing sources of information--Copyright/Reserved material cannot be used without author's WRITTEN permission. Thank you, (Ed.)

Editors.EChoes

This month's newsletter has a little bit of this and that....I have included some info on Gram-Karte, also on the Geneve, plus Tibercub Tips #47 (adjoining). There is a set of "computerized" definitions and a helpfull set of Funnelweb Menu Charts which originated with the LIMA (Ohio) UG. I was going to try to put together some of the information I have on the configuration and set up of Funnelweb, but I have not yet gotten through all of it myself! There are so many talented people making upgrades and adaptations to many of these programs, that it becomes very hard to say "which" program a person is talking about sometimes, and whether it is really going to be compatible in someones application, since most of the really advanced (fast or powerful) programs have some degree of hardware-dependent features. This is not just a TI 99/4A / Geneve problem; there are many hardware/soft ware in-compatible combinations in the IBM/Clone realm also!

On the "TIPS FROM THE TIGERCUB" series, I need to know if it is widely appreciated among HUG readers, so let me know if you want to see more of them. Certainly Jim Peterson has contributed tremendously to the TI users for the last few years with his educational and highly functional series of programs, tutorials, and hints. He possesses a marvelous wealth of knowledge of Basic and Ext. Basic programming and is willing to share with all. It is people like Jim who make the "4A" community a nice place to be! Thanks.

Next month: Some of the "sticky" features of Funnelweb and PRBASE. rtl-6/25/88

TIPS FROM THE TIGERCUB

#47

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TIGERCUB SOFTWARE
156 Collingwood Ave.
Columbus, OH 43213

Distributed by Tigercub Software to TI-99/4A Users Groups for promotional purposes and in exchange for their newsletters. May be reprinted by non-profit users groups, with credit to Tigercub Software.

Over 120 original programs in Basic and Extended Basic, available on cassette or disk, NOW REDUCED TO JUST $1.00 EACH!, plus $1.50 per order for cassette or disk and PP&M. Minimum order of $10.00. Cassette programs will not be available after my present stock of blanks is exhausted. The Handy Dandy series, and Color Programming Tutor, are no longer available on cassette.
Descriptive catalogs, while they last, $1.00 which is deductable from your first order.

Tigercub Full Disk Collections, reduced to $5 postpaid. Each of these contains either 5 or 6 of my regular catalog programs, and the remaining disk space has been filled with some of the best public domain programs of the same category. I am NOT selling public domain programs - they are a free bonus!
TIGERCUB'S BEST, PROGRAMMING TUTOR, PROGRAMMER'S UTILITIES, BRAIN GAMES, BRAIN TEASERS, BRAIN BUSTERS!, MANEUVERING GAMES, ACTION REFLEX AND CONCENTRATION, TWO-PLAYER GAMES, KID'S GAMES, MORE GAMES, WORD GAMES, ELEMENTARY MATH, MIDDLE/HIGH SCHOOL MATH, VOCABULARY AND READING, MUSICAL EDUCATION, KALEIDOSCOPES AND DISPLAYS

NUTS & BOLTS DISKS
These are full disks of 100 or more utility subprograms in MERGE format, which you can merge into your own programs and use, almost like having another hundred CALLs available in Extended Basic. Each is accompanied by printed documentation giving an example of the use of each.
NUTS & BOLTS (No. 1) has 100 subprograms, a tutorial on using them, and 5 pp. documentation. NUTS & BOLTS No. 2 has 109 subprograms, 10 pp. of documentation. NUTS & BOLTS #3 has 140 subprograms and 11 pp. of documentation.
NOW JUST $15 EACH, POSTPAID.

TIPS FROM THE TIGERCUB
These are full disks which contain the programs and routines from the Tips from the Tigercub newsletters, in ready-to-run program format, plus text files of tips and instructions.
TIPS (Vol. 1) contains 50 original programs and files from Tips newsletters No. 1 through No. 14. TIPS VOL. 2 contains over 60 programs and files from Nos. 15 thru 24. TIPS VOL. 3 has another 62 from Nos. 25 through 32. TIPS VOL. 4 has 48 more from issues No. 33 through 41.
NOW JUST $10 EACH, POSTPAID.

****
* NOW READY *
* TIPS FROM TIGERCUB VOL.5 *
* Another 49 programs and *
* files from issues No. 42 *
* through 50. Also $10 ppd *
****

TIGERCUB CARE DISKS #1,#2,#3 and #4. Full disks of text files (printer required).
No. 1 contains the Tips news letters #42 thru #45, etc. Nos. 2 and 3 have articles mostly on Extended Basic programming. No. 4 contains

Tips newsletters Nos. 46-52. These were prepared for user group newsletter editors but are available to anyone else for $5 each postpaid.

If you bought my C11 disk, Kid's Games, please check line 100 of the Butterfly and Flowers program and, if necessary, change it to -
1000 CALL CLEAR :: CALL SCREEN(4).
If you bought my C12 disk, More Games, and have trouble loading Lost Plane and Andromedan Invasion, please go to line 1000 of the LOAD program and change *TC-18* to *TC-18 and *TC-23* to *TC-23. Or, return the disks to me and I will fix them.

Thanks to Ollie Hebert for this fix to the Gordian Knot in Tips #36. This will keep it from running off the edge and crashing in the automatic mode.

```
270 GOSUB 400 :: R=R-24*(R<1
)+24*(R>24):: C=C-28*(C<3)+2
8*(C>30):: CH=128-(D=1)-(D=3
):: CALL GCHAR(R,C,G):: IF G
<>32 THEN IF INT(2*RND+1)<>1
 THEN CH=G
```

The trouble with me is that, before I finish one program I've thought of another that I want to try writing - and so I don't take time time to test completed programs as well as I should. The Decompactor in Tips #35 was one that should have been tested more thoroughly. I think this version will work. It will break an XBasic program into single-statement lines to make it easier to modify. Then, John Dow's Compactor or a similar program will put it back together.

```
100 !DECOMPACTER V.1.1 by Ji
m Peterson fixed 12/87
110 DISPLAY AT(3,1)ERASE ALL
:"TIGERCUB DECOMPACTER V.1.1
": :" Program must first be
-": :"RESequenced to greater
 in-":"crements than the num
ber"
120 DISPLAY AT(9,1):"of stat
ements in any one":"line.":
:"SAVEd by":" SAVE DSK(file
name),MERGE"
130 DISPLAY AT(16,1):"INPUT
FILENAME?":"DSK" :: ACCEPT A
T(17,4):IF$
140 DISPLAY AT(16,1)ERASE AL
L:"OUTPUT FILENAME?":"DSK" :
: ACCEPT AT(17,4):OF$
150 OPEN #1:"DSK"&IF$,INPUT
,VARIABLE 163 :: OPEN #2:"DS
K"&OF$,OUTPUT,VARIABLE 163
160 LINPUT #1:M$ :: LN=ASC(S
EG$(M$,1,1))*256+ASC(SEG$(M$
,2,1)):: IF LN>LN2 THEN 180
170 DISPLAY AT(12,1)ERASE AL
L BEEP:"ERROR! RESEQUENCE PR
OGRAM TO":"GREATER INCREMENT
S AND TRY":"AGAIN." :: CLOSE
 #1 :: CLOSE #2 :: STOP
180 LN2=LN
190 P=POS(M$,CHR$(130),3)::
IF P=0 THEN PRINT #2:M$ :: G
OTO 260
200 A$=SEG$(M$,1,P-1):: R=PO
S(A$,CHR$(132),3):: S=POS(A$
,CHR$(201),3)
210 IF R=0 THEN PRINT #2:A$&
CHR$(0):: GOTO 250
220 IF S=0 AND R<>0 THEN PRI
NT #2:M$ :: GOTO 260
230 IF S<>0 THEN IF S-R<3 TH
EN PRINT #2:A$&CHR$(0):: GOT
O 250
240 PRINT #2:M$ :: GOTO 260
250 LN=LN+1 :: LN2=LN :: GOS
UB 270 :: M$=LN$&SEG$(M$,P+1
,255):: GOTO 190
260 IF EOF(1)<>1 THEN 160 EL
SE CLOSE #1 :: CLOSE #2 :: D
ISPLAY AT(12,1)ERASE ALL:"En
ter NEW": :"Then Enter":" M
ERGE DSK"&OF$ :: END
270 LN$=CHR$(INT(LN/256))&CH
R$(LN-256*INT(LN/256)):: RET
URN
```

If you have my BXB routine from Tips #40 (corrected in Tips #42) or from my TIPS disk Vol. 4 or NUTS & BOLTS #3, or Genial Traveller Vol. 1 No. 6, here is a neat improvement that Barry Traver thought of. Key this in, run it to create a merge file on a disk. Then clear memory with NEW, merge in BXB, then MERGE DSK1.LINEZERO, and now save BXB again in merge format and it will CALL itself from line zero (and do something else that I'm not going to tell you about!

```
100 OPEN #1:"DSK1.LINEZERO",
VARIABLE 163,OUTPUT
110 M$=CHR$(0)&CHR$(0)&CHR$(
157)&CHR$(200)&CHR$(3)&"BXB"
&CHR$(130)&CHR$(157)&CHR$(20
0)&CHR$(4)&"CHAR"&CHR$(183)&
CHR$(200)&CHR$(2)&"30"
120 M$=M$&CHR$(179)&CHR$(199
)&CHR$(16)&"81C37EA58199663C
"&CHR$(182)&CHR$(0):: PRINT
#1:M$ :: PRINT #1:CHR$(255)&
CHR$(255)
```

And if you have merged in BXB, the edge character (ASCII 31) can be reidentified and colored (set 9) to give the screen an ornamental border.

```
100 CALL CHAR(31,"0"):: CALL
 CLEAR :: FOR J=1 TO 24 :: P
RINT :: NEXT J :: CALL CHAR(
31,"1824429999422418"):: CAL
L COLOR(9,5,16)
```

Here is an improved version of the CATWRITER program to create the Tigercub QUICKLOADER, which is intended for disks of programs which you have filled and do not plan to change. It will read the directory, display each filename, and ask you for the complete program name of each one. Then it prepares a program which displays one or more menu screens of complete program names, and auto-loads whichever one you select.
First, key in this part and save it to disk by SAVE DSK1.CAT1,MERGE. If you want, you can change the screen and character colors in line 10. Don't change the line numbers!

```
10 CALL CLEAR :: DIM M$(127)
:: CALL SCREEN(5):: FOR S=0
TO 14 :: CALL COLOR(S,16,1):
: NEXT S :: CALL PEEK(8198,A
```

```
):: IF A<>170 THEN CALL INIT
11 REM  (leave this in!)
12 ON WARNING NEXT :: GOSUB
21
13 X=X+1 :: READ M$(X):: IF
M$(X)<>"END" THEN 13
14 R=3 :: FOR J=1 TO X-1 ::
READ X$ :: DISPLAY AT(R,1):S
TR$(J);TAB(4);X$ :: R=R+1 ::
 IF R<23 THEN 17
15 DISPLAY AT(24,1):"Choice?
 or 0 to continue 0" :: ACCE
PT AT(24,26)VALIDATE(DIGIT)S
IZE(-3):N :: IF N>X-1 THEN 1
5
16 IF N<>0 THEN 19 :: R=3
17 NEXT J
18 DISPLAY AT(24,1):"Choice?
" :: ACCEPT AT(24,9)VALIDATE
(DIGIT):N :: IF N=0 OR N>X-1
 THEN 18
19 CALL CHARSET :: CALL CLEA
R :: CALL SCREEN(8):: CALL P
EEK(-31952,A,B):: CALL PEEK(
A*256+B-65534,A,B):: C=A*256
+B-65534 :: A$="DSK1."&M$(N)
:: CALL LOAD(C,LEN(A$))
20 FOR J=1 TO LEN(A$):: CALL
 LOAD(C+J,ASC(SEG$(A$,J,1)))
:: NEXT J :: CALL LOAD(C+J,0
):: GOTO 10000
21 CALL LOAD(8196,63,248)
22 CALL LOAD(16376,67,85,82,
83,79,82,48,8)
23 CALL LOAD(12288,129,195,1
26,165,129,153,102,60)
24 CALL LOAD(12296,2,0,3,240
,2,1,48,0,2,2,0,8,4,32,32,36
,4,91)
25 CALL LINK("CURSOR"):: RET
URN
10000 RUN "DSK1.1234567890"
```

Next, key in this little routine and run it to create a file called CAT2.

```
100 OPEN #1:"DSK1.CAT1",VARI
ABLE 163,INPUT
110 OPEN #2:"DSK1.CAT2",VARI
ABLE 163,OUTPUT
120 FOR J=10 TO 26 :: LINPUT
 #1:M$ :: PRINT #2:CHR$(0)&C
HR$(J)&CHR$(156)&CHR$(253)&C
HR$(200)&CHR$(1)&"2"&CHR$(18
1)&CHR$(199)&CHR$(LEN(M$))&M
$&CHR$(0):: NEXT J
130 PRINT #2:CHR$(255)&CHR$(
255):: CLOSE #1 :: CLOSE #2
```

Finally, key in CATMATRIX. Leave the line numbers as they are, we need that space after line 9.
Then MERGE in DSK1.CAT2 to combine the two, and SAVE.

```
1 CALL CLEAR :: CALL TITLE(1
6,"CATWRITER"):: CALL CHAR(1
24,"3C4299A1A199423C"):: DIS
PLAY AT(2,10):"Version 1.3":
:TAB(8);"! Tigercub Softwar
e"
2 DISPLAY AT(15,1):"For free
":"distribution":"but no pri
ce or":"copying fee":"to be
charged." :: FOR D=1 TO 500
:: NEXT D :: CALL DELSPRITE(
ALL)
3 DISPLAY AT(2,3)ERASE ALL:"
TIGERCUB CATWRITER V.1.3":::
" Will read a disk directory
,":"request an actual progra
m":"name for each program-ty
pe"
4 DISPLAY AT(7,1):"filename,
 and create a merg-":"able Q
uickloader which dis-":"play
s full program names and":"r
uns a selected program."
5 DISPLAY AT(12,1):" Place d
isk to be cataloged":"in dri
ve 1 and press any key" :: C
ALL KEY(0,K,S):: IF S=0 THEN
 5
9 OPEN #2:"DSK1.CATMERGE",VA
RIABLE 163,OUTPUT
100 OPEN #1:"DSK1.",INPUT ,R
ELATIVE,INTERNAL :: INPUT #1
:N$,A,J,K :: LN=1000 :: FN=1
100
110 DISPLAY AT(12,1):"Disk n
ame?":::N$ :: ACCEPT AT(14,1
)SIZE(-28):N$ :: LX$=STR$(14
-LEN(N$)/2):: LXLEN=LEN(LX$)
120 PR$=CHR$(0)&CHR$(11)&CHR
$(162)&CHR$(240)&CHR$(183)&C
HR$(200)&CHR$(1)&"1"&CHR$(17
9)&CHR$(200)&CHR$(LXLEN)&LX$
130 PR$=PR$&CHR$(182)&CHR$(1
81)&CHR$(199)&CHR$(LEN(N$))&
N$&CHR$(0):: PRINT #2:PR$
140 X=X+1 :: INPUT #1:P$,A,J
,B :: IF LEN(P$)=0 THEN 180
:: IF ABS(A)=5 OR ABS(A)=4 A
ND B=254 THEN 150 ELSE X=X-1
 :: GOTO 140
150 DISPLAY AT(12,1):P$;"
 PROGRAM NAME?" :: ACCEPT AT
(14,1)SIZE(25):F$
160 PRINT #2:CHR$(INT(FN/256
))&CHR$(FN-256*INT(FN/256))&
CHR$(147)&CHR$(200)&CHR$(LEN
(F$))&F$&CHR$(0):: FN=FN+1
170 M$=M$&CHR$(200)&CHR$(LEN
(P$))&P$&CHR$(179):: IF X<11
 THEN 140
180 IF M$="" THEN 200
190 PRINT #2:CHR$(INT(LN/256
))&CHR$(LN-256*INT(LN/256))&
CHR$(147)&SEG$(M$,1,LEN(M$)-
1)&CHR$(0):: LN=LN+1 :: M$="
" :: X=0 :: IF LEN(P$)<>0 TH
EN 140
200 PRINT #2:CHR$(INT(LN/256
))&CHR$(LN-256*INT(LN/256))&
CHR$(147)&CHR$(200)&CHR$(3)&
"END"&CHR$(0)
210 PRINT #2:CHR$(255)&CHR$(
255):: CLOSE #1 :: CLOSE #2
220 DISPLAY AT(8,1)ERASE ALL
:"Enter -":::"  NEW":::"  ME
RGE DSK1.CATMERGE":::"  DELE
TE ""DSK1.CATMERGE""":::"  S
AVE DSK1.LOAD"
230 SUB TITLE(S,T$)
240 CALL SCREEN(S):: L=LEN(T
$):: CALL MAGNIFY(2)
250 FOR J=1 TO L :: CALL SPR
ITE(#J,ASC(SEG$(T$,J,1)),J+1
-(J+1=S)+(J+1=S+13)+(J>14)*1
3,J*(170/L),10+J*(200/L)):::
NEXT J
260 SUBEND
```

Mike Stanfill and Ed Machonis and others have been publishing some neat little single-screen "tiny-gram" programs, so here is my contribution. It's a one-screen one-liner!

```
1 RANDOMIZE :: PRINT : : : :
 : :: A=INT(RND*7):: B=INT(R
ND*9+1):: FOR X=1 TO 5 :: Y=
A*X^2-B*X+B :: PRINT Y;:: NE
XT X :: Y=A*X^2-B*X+B :: PRI
NT : : :: INPUT "GUESS NEXT
NUMBER":N :: IF N=Y THEN PRI
NT :"RIGHT" :: GOTO 1 ELSE P
RINT :"CORRECT IS":Y :: GOTO
 1
```

MEMORY FULL! - Jim Peterson

end T.C.Tips#47.../

If you would like to see more of the TIGERCUB TIPS series in the HUG Newsletter please let me know...(Ed.)//

9640, Enlightenment

by J. Peter Hoddie, Boston Computer Society

I would like to set the story straight on hardware compatibility with the 9640. First of all, the TI, Cor-comp, and Myarc disk controllers will all work. It doesn't matter which eproa you have in the card. The TI controller can handle 80 track drives (just not in double density), the Cor-comp controller and the Myarc controller can handle 80 track and 16 or 18 sectors per track. The new reason for this is that the EPROM or ROM in the disk controller is not used by the 9640, but is replaced with code in the operating system. This allows the TI and Cor-comp controllers to run as fast as the Myarc currently does. The speed of disk access is really impressive - you may not recognize your disk drives. Any RS232 card from TI, Myarc or Cor-comp will work. Print spooling is built into the system for all cards, and the size of the spooler can now be set by the user. The print spooler is accessed just like a normal drive, such as PIO, rather than SPPIO as on the Myarc 512 card. The Horizon Ram disk will work, however, at this time in order to boot te system from it, it must use the HORIZON EPROM from Genial Computerware. This is not a ploy for me to make lots of money, but a decision made because of several unfortunate characteristics of the ROS distributed with the Horizon card. Currently there is support for only one Horizon Ram Disk, although this could change in the future. The Myarc 512 card can not be used as it is. However, for $15.00 Myarc will convert it so that it can be used as additional memory for the 9640. Once this change is made, the 512 card can not be used with the /4A, so carefully consider having this modification made. The speech synthesizer is supported but you have to buy a special card to put it into the expansion box. Such a card is available from Rave 99 for about $40.00. Your TI 32k or other memory cards such as Foundation will not work. Since the 9640 has over 600K of memory in its minimal configuration, this should not prove any grat hardship. At this time, the Megatronics GRAM card is not supported. The Cor-comp triple tech card will work, except that because of a somewhat faulty hardware decision (works on the /4A but not the 9640) the triple tech card will eat up about 1/8 of your available memory. The 9640 also supports an internal RAM disk which can be set to any size by the user, within the constraints of available memory. The current Myarc Winchester Personality card is supported, and of course the new Myarc hard drive/floppy controller will be supported when it becomes available. I hope this paragraph has cleared up any misunderstandings you may have had about the 9640 and your present hardware setup. Please let me know if you have any further questions.

The documentation of the 9640 doesn't currently mention some of the more interesting features that are in the computer. For example, all disk files are available and date stamped at creation and at any update. This information is available on disk catalogs, and even from Basic using an extension of the current method of cataloging a disk. The RAM disk support is done similarly to the Myarc MPES (midi-peripheral expansion system), in that if you assign the internal RAM disk to drive 1, you can then make your physical drive 1 respond as drive 2. This means that all drives can be made always available, which is not always possible on the /4A. This is done independent of CRU base, thanks to the single master DSR (device service routine) created for the 9640. For the assembly programmer there is a wealth of system utilities for graphics available through XOPs, written by Chris Faherty. The operating system also supports a new powerful set of disk access commands designed by Paul Charlton, and implemented by both of us. These allow for easy file and disk access from assembly for disk and file copying and comparing. The operating system also supports multi-tasking when not in /4A mode. This means you could be editing a file with your word processor, while down loading a file from a bulletin board, while a graphic image of a Frog dances on the corner of your screen. Multi-tasking allows you to run several programs at once - and this should open up some exciting possibilities in the future.

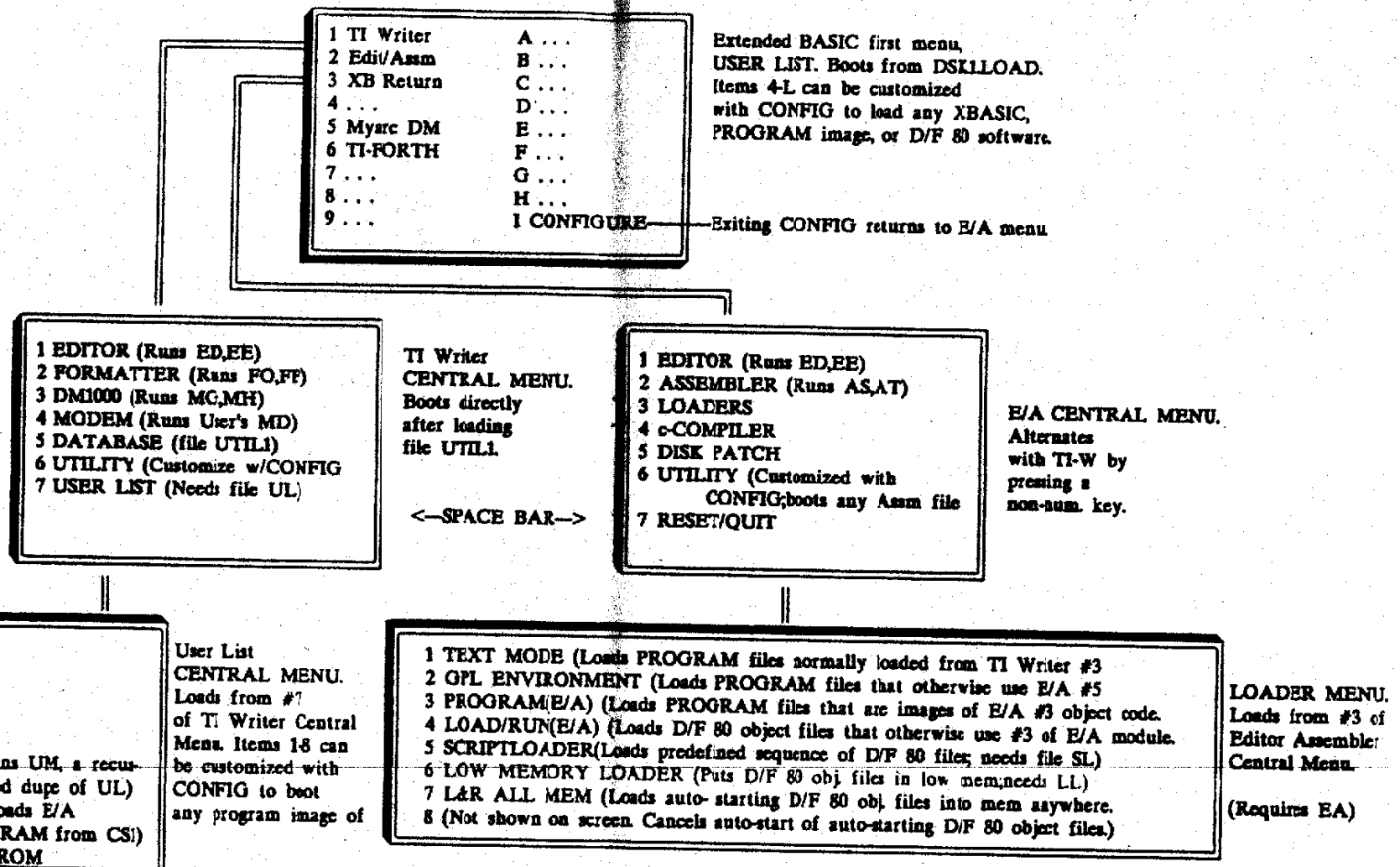
Until the operating system is released for the 9640, I would recommend taking anything you read from outside Myarc sources with a grain of salt. That is to say, without naming names, that I have read numerous articles on the 9640 which contain information that is just plain wrong. The articles claim that the machine can't do certain things, or that it will eventually do somethings better than it does now - and they are just completely wrong. While articles on the 9640 by people who have them at this stage are rather popular because people are crying out for any information they can get, many of those writing are very badly informed. This proble is as much a fault of Myarc as anyone. To release the hardware with incomplete software to anyone but developers was a serious mistake in my estimation. It has calmed many people down, but it has started a new furor over "where is the operating system" which is just as bad as the old "when will it be released". Lou Phillips has a habit of saying things to calm people down. If someone asks him when a product will be ready he tends to give the absolute best case answer. Unfortunately in this business, that tends to be way off base.

Credit: J. Peter Hoddie, Boston Computer Society, via L.A. User Group "TOPICS" ML, May 1988

Funnelweb 4.0 Flow Charts courtesy of
Charlotte TI-99 Users Group Newsletter
March 1988, Robert Simms, Ed.

FUNNELWEB 4.0 MENU FLOW CHART

FCTN-7 (AID) from any of these menus gives a disk directory.


1 TI Writer
2 Edit/Assm
3 XB Return
4 . . .
5 Myarc DM
6 TI-FORTH
7 . . .
8 . . .
9 . . .
A . . .
B . . .
C . . .
D . . .
E . . .
F . . .
G . . .
H . . .
I CONFIGURE
Extended BASIC first menu, USER LIST. Boots from DSK1.LOAD. Items 4-L can be customized with CONFIG to load any XBASIC, PROGRAM image, or D/F 80 software.
Exiting CONFIG returns to E/A menu
1 EDITOR (Runs ED,EE)
2 FORMATTER (Runs FO,FF)
3 DM1000 (Runs MG,MH)
4 MODEM (Runs User's MD)
5 DATABASE (file UTIL1)
6 UTILITY (Customize w/CONFIG
7 USER LIST (Needs file UL)
TI Writer CENTRAL MENU. Boots directly after loading file UTIL1.
<—SPACE BAR—>
1 EDITOR (Runs ED,EE)
2 ASSEMBLER (Runs AS,AT)
3 LOADERS
4 c-COMPILER
5 DISK PATCH
6 UTILITY (Customized with CONFIG;boots any Assm file
7 RESET/QUIT
E/A CENTRAL MENU. Alternates with TI-W by pressing a non-num. key.
1 . . .
2 . . .
3 . . .
4 . . .
5 MYARC DM
6 NEXT UL (Runs UM, a recustomized dupe of UL)
7 CASSETTE (Loads E/A PROGRAM from CS1)
8 CARTRIDGE ROM
User List CENTRAL MENU. Loads from #7 of TI Writer Central Menu. Items 1-8 can be customized with CONFIG to boot any program image of
1 TEXT MODE (Loads PROGRAM files normally loaded from TI Writer #3
2 GPL ENVIRONMENT (Loads PROGRAM files that otherwise use E/A #5
3 PROGRAM(E/A) (Loads PROGRAM files that are images of E/A #3 object code.
4 LOAD/RUN(E/A) (Loads D/F 80 object files that otherwise use #3 of E/A module.
5 SCRIPTLOADER(Loads predefined sequence of D/F 80 files; needs file SL)
6 LOW MEMORY LOADER (Puts D/F 80 obj files in low mem;needs LL)
7 L&R ALL MEM (Loads auto-starting D/F 80 obj files into mem anywhere.
8 (Not shown on screen. Cancels auto-start of auto-starting D/F 80 object files.)
LOADER MENU. Loads from #3 of Editor Assembler Central Menu.
(Requires EA)

Reformatted by Robert Simms from versions printed in the Lima, Ohio Users Group newsletter.

FUNNELWEB 4.0 CONFIGURE PROGRAM FLOW CHART

1 Continue Normally *(Use the first time CONFIG is run)*
2 Redo User Lists *(Use to alter and/or add to already configured XB and/or central menu User Lists)*
3 Redo Configuration
4 Back to FWb Vn 40

Boot Drive Tracking On? (Y/N)
Y-FWb expects all its own files and the user files accessed directly from central menus to be in the boot drive or in DSK1
N-Overrides boot drive tracking, allows specifying certain drives for TIW and E/A central menu files. Esp. useful with RAMdisks or multiple floppy drives.

Fixed drive # (TIW) DSK_
(Enter single digit drive number)
Fixed drive # (Ed/As) DSK_
(Enter single digit drive number. This This is the SECONDARY DRIVE number.)

Utility drive default? DSK?.UTIL1
(Enter single digit number for default to be displayed when LF/SF is first used in the Editor.)

Editor printer device *(PIO,etc.)*
Format printer device *(PIO.LF, .CR, etc.)*
Workfile Name Default *(If you enter something here, the name will appear after DSKx. the first time LF or SF is used in Editor after booting FWb. If no name is entered, you may exit FWb, reboot later and usually find the last file name still in the mailbox.)*

Edit Utility Choice #6
Edit Opt #6 filename *(Type in screen display name of an assembly language PROG user file you want to be able to boot from a central menu. Then enter a two character name for this file. Repeat process for the other central menu. These files must be on the same disk as the other files accessed by the displayed TIW or Ed/Assm menu.)*

Color Choice Selection *(Colors and their hex values are displayed. Ten foreground/background combinations are shown with the first being the combination showing at powerup. The other 9 can be cycled through by pressing zero from most FWb menus. Edit the color combinations or press ENTER to cycle through all ten.*
1 Cycle Colors *(Press 1 repeatedly to see them)*
2 Select Again *(Re-edit colors just entered)*
3 Original Set *(Re-select colors on orig. FWb dist)*

(Options) Do you wish to edit the central menu screen UL before saving UTIL1? (Y/N) No
Y-You get a display of screen and file data for the first 8 items in the central menu User List. Press N(ext) and B(ack) to cycle through these 8 items. Pres E(dit) to enter or change data of the displayed UL item. Editing screen prompts are identical to those shown below for XB User List editing beginning with Edit file name for loader. When finished with all editing, press S(ave).

Save Data to DSKx.UL *(Enter a drive number. If CONFIGuring more than one User List, change UL to UM, UN, etc. If you wish to CONFIGure more user lists, answer Y to option to again edit central menu UL. Otherwise enter N to continue.*

Do you wish to edit the XB LOAD program UList before saving UTIL1? (Y/N)
Yes: *No*
(Follow screen prompt and load LOAD. You then see the XB User first menu with cursor on choice 4.
Choices 4 through 1 must be cycled through before leaving XB UL configuring routine. Type in desired menu display for each item, then ENTER. Or, repeatedly press ENTER for defaults listed.
Not finished with Cycle_____Finished with cycle

1 XBasic Program (For XBasic user file)
2 Assembly Loaders *(For assembly user file)*
3 Return to XBasic *(Causes this XB UL item, when pressed, to return immediately to XBasic, as does UL item 3. After editing this item, you are returned to the XB first menu UL display to edit next UL item.)*
4 Leave Unaltered *(Returns to the XB first menu UL to edit the next UL item.*

1 Memory Image Program *(Assembly language file that lists as PROGRAM in a disk directory)*
2 Tagged Object Code *(A single D/F80 assembly file)*
3 Script Load File *(A sequence of D/F80 files)*

1 No special conditions *(Usually chosen)*
2 Load low memory first
3 Autostart - E/A LFMH
4 Intercept autostart

Select FWb File Name *(Press 1 or 2 for the correct name of the reboot file. FWb originally comes configured as UTIL1.)*
1 Util1
2 RELOAD

Save File to Drive #? *(Select a single digit and/or press ENTER)*
Press 1 to save configuration *(You may redo your configuration by pressing 2 or 3, or return to FWb with 4.)*
Configuration saved *(At this point, program returns to the first CONFIG menu at the top of the flow chart.)*

Funnelweb 4.0 Flow Charts courtesy of Charlotte TI-99 Users Group Newsletter March 1988, Robert Simms, Ed.

1 Text Mode (TIW) *(Usually loads from 3 of TIW module)*
2 GPL Environment *(Usual choice for E/A5 files)*
3 E/A Program file

Boot tracking off? (Y/N) *(Y-prevents the boot drive number from overwriting the drive number specified as part of the filename.)*
Secondary Disk? (Y/N) *(This is the drive specified near the beginning of CONFIG for the E/A central menu if boot tracking was turned off. If this number is different than the boot drive number and if you answer Y to this question then FWb will look for the user file in the secondary drive.)*
Provide reminder? (Y/N) *(If the user file is not on the same disk as the rest of your FWb files then answer Y. FWb will stop when the user file is selected from a User List and the message Insert Utility Disk in Drive x (the secondary drive) will be displayed.*

HUG LIBRARY CATALOG ADDENDUM

10087 UPDATE V.4.0 FOR c99 COMPILER Printer optional
The latest update by Clint Pulley of his c99 compiler. Replaces several files from original releases. Comes with complete documentation. 354 sectors

10088 TURBO PASCAL COMPRESSEA/5**
This is a "Shareware" program from Klaus-Juergen Hoeltgen from West Germany. This program will compress your XB programs from a merged format. Will not run with Corcomp 512K card. 140 sectors

10089 ALL SAVEXB**
A program by Todd Kaplan that allows you to move and save relocatable assembly language files to High Memory and save with Extended Basic program. 49 sectors

10090 JOHN JOHNSON'S MENU V 7.3HORIZON RAM DISK RQD.**
John Johnson's menu for Horizon Ram Disks from 256K to 1024K(1 MEG). Comes with complete documentation. 247 sectors

10091 ZEROXB** Gemini 10X printer
A program that will add slashes to the zero when outputting to a printer. Works with Gemini 10X. 3 sectors

10092 SPEECH 1 & 2XB TI's "Text-To-Speech" disk rqd.**
Text-To-Speech utilities with documentation as used by Irwin Hott using XB and TE-II. Requires TI's "Text-To-Speech" disk to work. 195 sectors

10093 LISP 99 V1.0EA/5**
A "Freeware" program from Charles Rentmeesters of Madison, Wi. This is a Lisp interpreter for the TI 99/4A. Comes with complete documentation. 167 sectors

10094 TI-WRITER SPEECH PROGRAMS 1 & 2XB** Speech synthesizer rqd.
An assembly subroutine by John Guion that allows you to use a speech synthesizer to read and speak your TI-WRITER text files. Comes with complete documentation. 34 sectors

10095 BASIC BUILDERXB**
This is an XB loaded assembly language program by Paolo Bagnaresi that will convert DV/80 files into runnable XB programs. Comes with complete documentation. 629 sectors

HUG LIBRARY CATALOG ADDENDUM
July 1988

0253 BANDITXB**
A cute slot machine game by Gregory Rashall. 31 sectors

1322 RLB-DUCK TALESDF/128** Printer required
A cute picture of Ebenezer Duck that can be printed out using.Program #1078. 25 sectors

1323 RLB-INDIANA JONESDF/128** Printer required
A good picture of hero Indiana Jones that can be printed out using Program #1078. 19 sectors

1324 RLB-ROAD RUNNERDF/128** Printer required
A cute cartoon picture of Wiley Coyote and the Road Runner that can be printed out using Program #1078. 25 sectors

1325 RLB-STAR WARSDF/128** Printer required
A pretty color picture of a scene from the movie that can be printed out using Program #1078. 25 sectors

1326 RLB-U.S.S. ENTERPRISEDF/128** Printer required
A beautiful color picture of the Enterprise that can be printed out using Program #1078. 50 sectors

5279 SAM MOORE'S MUSIC DISKIB**
A collection of Sam Moore's music with a continuous play IB loader that plays one song after another. The loader can be used with other IB disks. 352 sectors

5280 TIGERCUB COUNTRYIB**
This is a disk of 20 or so country songs by Jim Peterson. An excellent music disk. 356 sectors

5281 STARTREKIB** Speech Synthesizer
This is a revised version of the singing music disk by Ken Gilliland. 335 sectors

7060 U D CIB**
A useful XB disk catalog program from Harry T. Brashear of The Western New York 99'ers. It is distributed as "Fairware". Has many useful features. Comes with complete documentation. Disk must be named "PGM/CAT" to run. 137 sectors

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